

REMARKS

Claims 1-10 are pending in the present application. Claim 1 is herein amended. Claim 3 is herein canceled. No new matter has been entered.

Claim Rejections - 35 U.S.C. §103

Claims 1-3 and 5-8 are rejected under 35 U.S.C. §103(a) as being unpatentable over Corvasce et al. US 6,300,654 B1 in combination with Sasaki et al. US 6,444,099 B1 and Matsuura et al. US 6,964,873 82.

Applicants herein amend the claims to clarify the invention. Thereafter, Applicants respectfully disagree with the rejection because not all of the claimed limitations are met or suggested by the cited references, alone or in combination.

Claim 1 has been amended to define as the lower layer to include a titanium layer. The subject matter "constituting a lower-electrode conductive film by the upper and lower layers" has been deleted in claim 1 only for clarity purpose. Claim 3 has been canceled.

As the Examiner correctly notes, Corvasce et al. does not disclose keeping substrate temperature higher than room temperature and lower than 200°C while sputtering a Ti lower layer 26 of a lower-electrode conductive film on the insulating film 24. Accordingly, the Examiner relies upon the disclosure of Matsuura et al for disclosure of its Ti adhesion layer 33A (col. 7, lines 34-50). However, Matsuura et al. does not disclose that the Ti adhesion layer 33A is formed at the substrate temperature higher than room temperature. In col. 7, lines 36-38, Matsuura et al. discloses that lower electrode 33 of platinum is formed at a room temperature on

an adhesion layer 33 of Ti. Titanium adhesion layer 33 is formed before the Pt lower electrode 33 is formed, and Matsuura et al. is silent about the deposition temperature for the Ti adhesion layer.

The Examiner also relies upon Sasaki et al. for disclosure of its "Ti sputtering" in Example 2 (col. 7, lines 15-30). However, as the Examiner underlines in the office action, Example 2 of Sasaki et al. is directed to conditions for forming titanium nitride thin film, which is not a titanium layer. In view of the fact that Sasaki et al. uses nitrogen gas in the sputtering, Ti in the "target 2" will be nitrified in the sputtering, so that Ti film will not be formed. Thus, Sasaki et al. does not disclose substrate temperature lower than 200°C for forming Ti film.

Claim 1 requires that the lower layer includes a titanium layer, and that the lower layer be formed at the substrate temperature higher than room temperature and lower than 200°C. However, even if the references were combined, such combination would not lead to the process of claim 1 as noted above.

The Examiner also cites Ohwaki et al. for rejecting claims 4 and 10, and Noguchi et al. for claim 9. However, Ohwaki et al. and Noguchi et al. do not remedy the deficiency of Matsuura et al. and Sasaki et al.

In conclusion, Applicants respectfully request that the Examiner reconsider the rejections of record in light of the amended claims presented herein.

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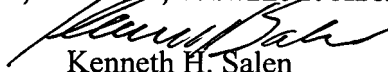
In view of the aforementioned amendments and accompanying remarks, Applicants submit that the claims, as herein amended, are in condition for allowance. Applicants request such action at an early date.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney to arrange for an interview to expedite the disposition of this case.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

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